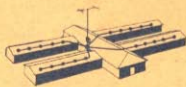


JP-1

JERROLD

REFERENCE  
DATA

FOR TELEVISION SYSTEMS



MOTELS



BUILDINGS



HOMES



"NEIGHBORHOOD CABLE" SYSTEMS

# **JERROLD** *High Fidelity* **TV EQUIPMENT**

... for IMPROVING and EXPANDING TV RECEPTION in:

## **Individual Homes**

Both Rural and Metropolitan, for one or many sets.

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"Neighborhood Cable" System, one antenna for a group of homes.

## **Dealer Showrooms and Service Shops**

"Color Perfect" reception for display or servicing.

## **Commercial Buildings**

Apartments, Motels, Hotels, Schools, Institutions, etc.

**ALL JERROLD EQUIPMENT DESIGNED FOR COLOR**

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20 1/2

JERROLD	FREQUENCY DATA / CHANNEL					
	2	3	4	5	6	FM
FREQ-MC	54 60	60 66	66 72	76 82	82 88	88 - 108 MC
PIX-MC	55.25	61.25	67.25	77.25	83.25	
SND-MC	59.75	65.75	71.75	81.75	87.75	
$\lambda$ AIR (MID)	205"	186"	170"	148"	138"	
$\lambda$ COAX (MID; V.P.-66)	135"	123"	112"	97.5"	91"	

(COLOR SUB CARRIER = PIX CARRIER + 3.58 MC APPROXIMATE)

**JERROLD****FREQUENCY DATA/CHANNEL**

	7	8	9	10	11	12	13
FREQ-MC	174 180	180 186	186 192	192 198	198 204	204 210	210 216
PIX-MC	175.25	181.25	187.25	193.25	199.25	205.25	211.25
SND-MC	179.75	185.75	191.75	197.75	203.75	209.75	215.75
$\lambda$ AIR (MID)	66.5"	64.5"	62.25"	60.5"	58.5"	57"	55.25"
$\lambda$ COAX (MID; V.P.-66)	44"	42.5"	41"	40"	38.5"	37.5"	36.5"

(COLOR SUB CARRIER = PIX CARRIER + 3.58 MC APPROXIMATE)

<b>JERROLD</b>	<b>CABLE ATTENUATION DATA/CHANNEL *</b>					<b>FM</b>
	2	3	4	5	6	
<b>CABLE MODEL</b>	CABLE ATTENUATION $\frac{\text{db}}{100' \text{ PIX}}$					88-108 MC
RG-59/U	2.8	3.0	3.2	3.4	3.6	
RG-6/U	2.1	2.2	2.3	2.4	2.6	
RG-11/U	1.6	1.7	1.8	1.9	2.0	
RG-35/U	.52	.55	.58	.62	.65	

**JERROLD****CABLE ATTENUATION DATA/CHANNEL \***

CABLE MODEL	7	8	9	10	11	12	13
	CABLE ATTENUATION db / 100' PIX						
RG-59/U	5.3	5.4	5.5	5.6	5.7	5.8	5.9
RG-6/U	4.0	4.05	4.10	4.15	4.20	4.25	4.3
RG-11/U	2.7	2.75	2.80	2.85	2.90	2.95	3.0
RG-35/U	1.10	1.15	1.20	1.25	1.30	1.35	1.4

\* MAXIMUM ATTENUATION

JERROLD	1477 OR LT77 COLOR		
	RED	YELLOW	GREEN
CHANNELS	ISOLATION	ISOLATION	ISOLATION
	FEED THRU	FEED THRU	FEED THRU
2	27.5 .25	24 .4	19 .2
6	27.5 .25	21 .4	13.5 .5
7	22.5 .25	17.5 .6	9 1.0
13	21 .25	15.5 .6	7 1.5



JERROLD	1431 OR LT-310 COLOR		
	RED	YELLOW	GREEN
CHANNELS	ISOLATION	ISOLATION	ISOLATION
	FEED THRU	FEED THRU	FEED THRU
2	26 .1	22.5 .2	19.5 .3
6	25 .3	19 .4	15 .4
7	19 .5	17 .6	10 .7
13	19 .7	16 .9	9 1.2

JERROLD		TAP-OFF DATA / CHANNEL										
		2		3		4		5		6		FM
MODEL	COLOR CODE	A	B	A	B	A	B	A	B	A	B	88 - 108 MC
1401 AND PT-1461	RED	27	-	26	-	25	-	23	.06	21	.10	
	YELLOW	22	.06	21	.08	20	.10	19	.11	18	.12	
	GREEN	19	.12	18	.14	18	.16	17	.18	16	.20	
1404	YELLOW	22	.25	21	.32	20	.40	19	.44	18	.50	
	GREEN	19	.50	18	.56	18	.64	17	.72	16	.80	

A = ISOLATION db

B = FEED THROUGH db

# JERROLD

## TAP-OFF DATA/CHANNEL

		7		8		9		10		11		12		13	
		A	B	A	B	A	B	A	B	A	B	A	B	A	B
1401 AND PT-1461	RED	17	.11	17	.11	17	.12	17	.13	17	.14	16	.15	15	.15
	YELLOW	14	.25	14	.28	13	.30	13	.32	13	.33	12	.35	11	.50
	GREEN	11	.54	11	.57	10	.60	10	.62	9	.64	9	.67	9	.90
1404	YELLOW	15	1.2	15	1.2	14	1.3	14	1.3	14	1.3	13	1.4	13	1.4
	GREEN	11	2.1	11	2.2	10	2.3	10	2.5	10	2.6	9	2.7	9	2.8

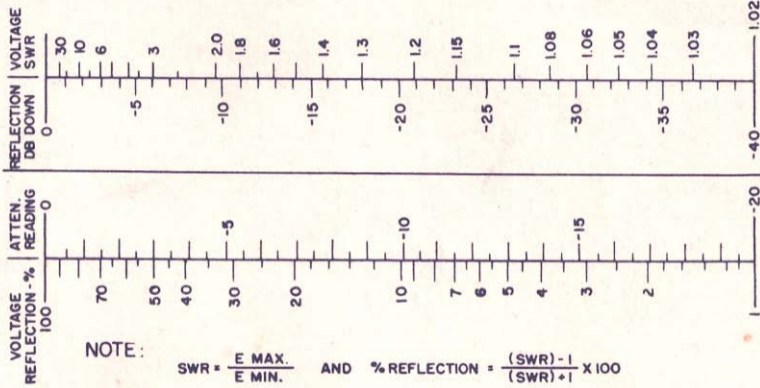
A = ISOLATION db

B = FEED THROUGH db

TRANSMISSION LINE	WIRE SIZE AND SPACING	IMPEDANCE IN OHMS	ATTENUATION IN DB/100'			VELOCITY FACTOR
			50MC	100MC	200MC	
RG-59/U	22 CW	72	2.5	3.5	5.8	.66
RG-11/U	18(7S-26)	72	1.4	2.0	3.2	.66
TUBULAR TWIN LEAD	20(7S-28)	300		1.4	2.05	.85
FLAT TWIN LEAD	20(7S-28)	300		1.1	1.7	.85
HEAVY DUTY TWIN LEAD	18(7S-26)	300	.7	1.1	1.7	.82
OPEN WIRE	18-1"	470	.4	.45	.6	.93
OPEN WIRE	18CW-1"	470	.4	.45	.6	.93
OPEN WIRE	12-2"	470	.4	.45	.6	.93
OPEN WIRE	12 CW-2"	470	.4	.45	.6	.93

10 LOSS OF FLAT LINES INCREASES UP TO 6 TIMES WHEN WET

## V.S.W.R. CHART



NOTE:

$$SWR = \frac{E \text{ MAX.}}{E \text{ MIN.}}$$

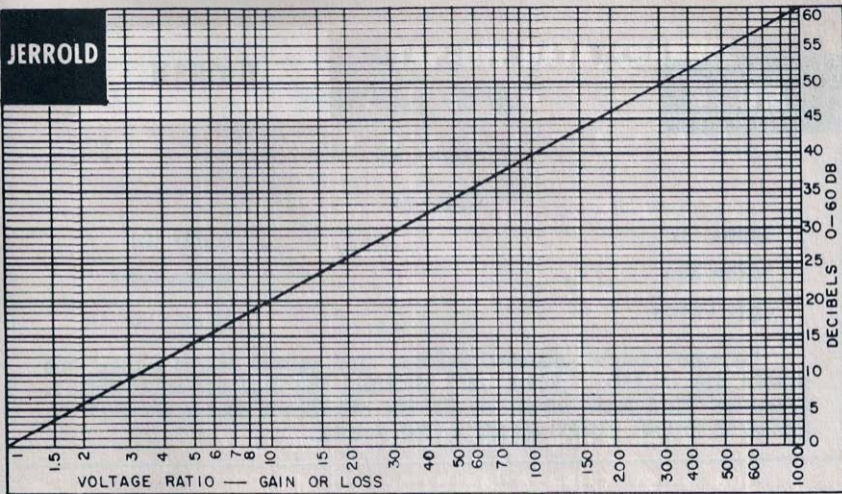
$$\text{AND \% REFLECTION} = \frac{(SWR) - 1}{(SWR) + 1} \times 100$$

## DECIBELS AND DBJ CHART

REF. LEVEL 0 DBJ = 1000 UV ACROSS 72 OHMS

+	60 DBJ	- - - - -	1,000,000 UV	-	2 DBJ	- - - - -	794 UV
	50 DBJ	- - - - -	316,000 UV		3 DBJ	- - - - -	708 UV
	40 DBJ	- - - - -	100,000 UV		6 DBJ	- - - - -	501 UV
	30 DBJ	- - - - -	32,000 UV		10 DBJ	- - - - -	316 UV
	20 DBJ	- - - - -	10,000 UV		12 DBJ	- - - - -	250 UV
	18 DBJ	- - - - -	7,943 UV		15 DBJ	- - - - -	179 UV
	15 DBJ	- - - - -	5,623 UV		18 DBJ	- - - - -	126 UV
	12 DBJ	- - - - -	3,981 UV		20 DBJ	- - - - -	100 UV
	10 DBJ	- - - - -	3,162 UV		30 DBJ	- - - - -	32 UV
	6 DBJ	- - - - -	1,995 UV		40 DBJ	- - - - -	10 UV
3 DBJ	- - - - -	1,413 UV	50 DBJ	- - - - -	3 UV		
2 DBJ	- - - - -	1,259 UV	60 DBJ	- - - - -	1 UV		
	0 DBJ	- - - - -	1,000 UV				

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## DB CALCULATIONS

$$3\text{DB} = 1.4\text{X}$$

$$6\text{DB} = 2\text{X}$$

$$10\text{DB} = 3\text{X}$$

$$20\text{DB} = 10\text{X}$$

$$30\text{DB} = 30\text{X}$$

$$40\text{DB} = 100\text{X}$$

$$50\text{DB} = 300\text{X}$$

$$60\text{DB} = 1000\text{X}$$

To approximate unlisted values, find values above whose sum equals the unlisted value, and multiply the corresponding ratios. Example: Find ratio equal to 52 db.  $40\text{ db} + 6\text{ db} + 6\text{ db} = 52\text{ db}$ . Stated in ratios,  $(100\text{X}) \times (2\text{X}) \times (2\text{X}) = 400\text{X}$ .



## FREE ENGINEERING AND LAYOUT SERVICE

JERROLD maintains a free engineering and layout service to assist you in the planning and installation of Jerrold Multi-Outlet Systems.

To furnish you with a layout diagram, bill of materials and installation suggestions, we need the following information:

1. Geographic location and stations to be carried.
2. Number of receivers to be served.
3. Type of antennas being used and approximate strength of received signals.
4. Height of antennas.
5. Most practical routes for running cable.
6. Distances in feet along proposed cable runs.
7. Distances between receiver locations.
8. Note as to whether locality is business, residential or rural.

See your distributor or write direct to Jerrold Electronics Corporation, 15th and Lehigh, Philadelphia 32, Penna.

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**LOOK TO**



**JERROLD**

for

The Finest T.V. "reception aids" and  
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